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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,051	03/02/2004	Victor ChiSiang Choo	STL11375	2836
27365 7590 09/25/2008 SEAGATE TECHNOLOGY LLC C/O WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3244				
			EXAMINER KIM, PAUL D	
			ART UNIT 3729	PAPER NUMBER
			MAIL DATE 09/25/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/791,051

Applicant(s)

CHOO ET AL.

Examiner

Paul D. Kim

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-19, 21-23, 25-29, 31-33 and 35-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-19, 21-23, 25-29, 31-33 and 35-40 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/30/2008 has been entered.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 36, 39 and 40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Re. Claim 36: The phrase "a sliding engagement of the inner portion of the clamp against the assembly tool" as recited in line 2 was not described in the specification as originally filed and appear to be new matter.

Re. Claim 39: The phrase "the clamping force slidingly engaging the inner portion of the clamp against the assembly tool" as recited in lines 1 and 2 was not described in the specification as originally filed and appear to be new matter.

Re. Claim 40: The phrase "imparting a sliding movement of the inner portion of the clamp" as recited in line 1 was not described in the specification as originally filed and appear to be new matter.

3. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re. Claim 17: The phrase "engaging the inner portion of the clamp through a slot between flange segments of the clamping interface; and removing the clamp" as recited in lines 2-4 renders the claim vague and indefinite. It is unclear as to what makes the inner portion of the clamp through a slot between flange segments of the clamping interface engaged and removed the clamp.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 21-23, 25-29, 31-33, 35, 37 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Ng (US PAT. 7,215,509).

Ng teaches a process of clamping storage media comprising steps of: supplying an outward force in a first direction (194, downward Y-direction) via contacting engagement with an assembly tool (188) against an inner portion (154) of a clamp (200) as shown in Fig. 8; and supplying a clamping force in a second direction (194, upward Y-direction) different from the first direction (such as an opposite direction) to disengage the inner portion of the clamp from the assembly tool, thereby reducing the opening to install the clamp over a flange of a clamping interface (138) as shown in Figs. 10-12 (see also col. 7, line 13 col. 8, line 38).

As per claim 16 the clamping interface includes a spindle portion (108, as shown in Fig. 1) rotatable relative to a hub and at least one disc (110) is assembled relative to the spindle portion prior to supplying the force to install the clamp as shown in Figs. 4-9.

As per claims 22 and 28 an inverted spring portion (a sloped tip portion) of the clamp is snap fitting into the groove of the clamping interface as shown in Fig. 9.

As per claim 23 the inner portion of the clamp is engaged along a sloped surface of an assembly tool (192) to supply the outward force to the inner portion prior to supplying the clamping force as shown in Fig. 7.

As per claim 25 the clamp includes a plurality of tabs (154) spaced about an inner circumference of the clamp and the assembly tool engages one or more of the plurality of tabs to bias the inverted spring portion of the clamp outwardly to install the clamp over a flange of the clamping interface as shown in Fig. 8.

As per claim 26 the clamping force is supplied while inner (190) and outer tools (192) engages the inner and outer portions of the clamp as shown in Fig. 8.

As per claims 27 and 31 the clamping interface is formed on a spindle assembly (108 as shown in Fig. 1) and one or more discs (110) on the spindle motors prior to supplying the clamping force as shown in Figs. 4-9.

As per claim 29 the outward force is supplied to the inner portion of the clamp prior to supplying the clamping force as shown in Figs. 8 and 9.

As per claim 32 the clamp is released the clamp from the assembly tool to snap fit the clamp into a groove of the clamping interface by supplying the clamping force step.

As per claim 33 at least one disc (110) is supported on a ledge surface (a surface that is co-planar with a top surface of the disk, 110) of the clamping interface and the clamp is snap fitting into the groove of the clamping interface having a surface recessed below the ledge surface of the clamping interface by supplying the clamping force step as shown in Fig. 9.

As per claim 35 the first direction is generally transverse to the second direction as shown in Figs. 8 and 10.

As per claim 37 the clamping force is supplied by moving the inner portion of the clamp along the sloped surface of the assembly tool as shown in Fig. 11.

As per claim 38 the engaged clamp is positioned proximate to the clamping interface prior to supplying the clamping force as shown in Fig. 9.

Allowable Subject Matter

6. Claims 18 and 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 17-19, 21-23, 25-29, 31-33 and 35-40 have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant's arguments filed 8/11/2008 have been fully considered but they are not persuasive. Applicant argues that the prior art of record, Ng, fails to disclose the claimed invention such as supplying an outward force in a first direction and supplying a clamping force in a second direction different from the first direction. Examiner traverses the argument. According to the Fig. 7, an outward force is supplied in a first direction (194, downward in Y-direction) to an inner portion of a clamp follow by supplying a clamping force in a second direction (194, upward in Y-direction), which is different from the first direction to install the clamp over the flange of the clamping interface.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D. Kim whose telephone number is 571-272-4565. The examiner can normally be reached on Monday-Thursday between 6:00 AM to 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul D Kim/
Primary Examiner, Art Unit 3729